AMENDMENT OF SOLICITATION/MODIFICATION OF CONTRACT

1. CONTRACT ID CODE	PAGE OF PAGES
	1 | 10

2. AMENDMENT/MODIFICATION NO.	3. EFFECTIVE DATE	4. REQUISITION/PURCHASE REQ. NO.	5. PROJECT NO.(If applicable)
U0002	27-Dec-2007		

6. ISSUED BY	CODE	7. ADMINISTERED BY (If other than item 6)	CODE
AFGHANISTAN ENGINEER DISTRICT US ARMY CORPS OF ENGINEERS KABUL APO AE 09356	W917PM	See Item 6	

8. NAME AND ADDRESS OF CONTRACTOR (No., Street, County, State and Zip Code)		
	X	9A. AMENDMENT OF SOLICITATION NO. W917PM-08-R-0015
	X	9B. DATED (SEE ITEM 11) 15-Dec-2007
		10A. MOD. OF CONTRACT/ORDER NO.
		10B. DATED (SEE ITEM 13)
CODE / FACILITY CODE		

11. THIS ITEM ONLY APPLIES TO AMENDMENTS OF SOLICITATIONS

[X] The above numbered solicitation is amended as set forth in Item 14. The hour and date specified for receipt of Offer [X] is extended, [ ] is not extended.

Offer must acknowledge receipt of this amendment prior to the hour and date specified in the solicitation or as amended by one of the following methods: (a) By completing Items 8 and 15, and returning _____ copies of the amendment; (b) By acknowledging receipt of this amendment on each copy of the offer submitted; or (c) By separate letter or telegram which includes a reference to the solicitation and amendment numbers. FAILURE OF YOUR ACKNOWLEDGMENT TO BE RECEIVED AT THE PLACE DESIGNATED FOR THE RECEIPT OF OFFERS PRIOR TO THE HOUR AND DATE SPECIFIED MAY RESULT IN REJECTION OF YOUR OFFER. If by virtue of this amendment you desire to change an offer already submitted, such change may be made by telegram or letter, provided each telegram or letter makes reference to the solicitation and this amendment, and is received prior to the opening hour and date specified.

12. ACCOUNTING AND APPROPRIATION DATA (If required)

13. THIS ITEM APPLIES ONLY TO MODIFICATIONS OF CONTRACTS/ORDERS. IT MODIFIES THE CONTRACT/ORDER NO. AS DESCRIBED IN ITEM 14.

[ ] A. THIS CHANGE ORDER IS ISSUED PURSUANT TO: (Specify authority) THE CHANGES SET FORTH IN ITEM 14 ARE MADE IN THE CONTRACT ORDER NO. IN ITEM 10A.

[ ] B. THE ABOVE NUMBERED CONTRACT/ORDER IS MODIFIED TO REFLECT THE ADMINISTRATIVE CHANGES (such as changes in paying office, appropriation date, etc.) SET FORTH IN ITEM 14, PURSUANT TO THE AUTHORITY OF FAR 43.103(B).

[ ] C. THIS SUPPLEMENTAL AGREEMENT IS ENTERED INTO PURSUANT TO AUTHORITY OF:

[ ] D. OTHER (Specify type of modification and authority)

E. IMPORTANT: Contractor [ ] is not, [ ] is required to sign this document and return _____ copies to the issuing office.

14. DESCRIPTION OF AMENDMENT/MODIFICATION (Organized by UCF section headings, including solicitation/contract subject matter where feasible.)

Wall Sia Sang; Kabul Afghanistan

The purpose of this amendment is to replace section 01010 Scope of Work, and Section 01015 Technical requirements in there entirety and replace with the revised section 01010 Scope of Work, and Section 01015 Technical requirements dated 27 December 2007. Replace Appendix A Site Maps and Pictures and Appendix B Typical Wall and Gate Details in its entirety with the revised Appendix A Site Maps and Pictures and Appendix B Typical Wall and Gate Details.

The due date for proposals have been extended, proposals are due 5 December 2007 not later than 5:00 P.M.

All other terms and conditions remain unchanged.

Except as provided herein, all terms and conditions of the document referenced in Item 9A or 10A, as heretofore changed, remains unchanged and in full force and effect.

15A. NAME AND TITLE OF SIGNER (Type or print)		16A. NAME AND TITLE OF CONTRACTING OFFICER (Type or print) TEL: EMAIL:	
15B. CONTRACTOR/OFFEROR _____ (Signature of person authorized to sign)	15C. DATE SIGNED	16B. UNITED STATES OF AMERICA BY _____ (Signature of Contracting Officer)	16C. DATE SIGNED

SECTION SF 30 BLOCK 14 CONTINUATION PAGE

SUMMARY OF CHANGES

SECTION 00800 - SPECIAL CONTRACT REQUIREMENTS

The following have been modified:

SECTION 01010

ANA Perimeter Wall - Sia Sang Kabul, Afghanistan
01010-1 of 4

SECTION 01010
Revised 27 December 2007
SCOPE OF WORK
PART 1 - GENERAL

The project consists of the design and construction of a new perimeter wall and two steel security gates. Refer to Appendix A and B for approximate site location; wall location, dimensions and details; and gate locations and details. The project is defined as the design, material, labor, and equipment to construct a perimeter wall and two security gates for the ANA base at Sia Sang. The work within this contract shall meet and be constructed in accordance with current U.S. design and International Building Codes (IBC), Life Safety Codes (NFPA-101), Force Protection and security standards. A partial listing of references is included herein:

IBC, International Building Codes 2003
NFPA 101, Life Safety Codes

1.1 ENGLISH LANGUAGE REQUIREMENT

All information shall be presented in English. The Contractor shall have a minimum of one Englishspeaking
representative to communicate with the COR at all times when work is in progress.

1.2 SUBMITTALS

Submittals and a Submittal Register are required as specified in Section 01335 of the Basic Contract.

1.3 CQM TRAINING REQUIREMENT

Before project design and construction begin, the Contractor's Quality Control Manager is required to have completed the U.S. Army Corps of Engineers CQM course, or equivalent. The Construction Trades Training Center (CTTC) in Jalalabad, Afghanistan provides a course that satisfies the requirement. Courses are offered at regular intervals. For enrollment and course information contact CTTC at the following:

Mhd. Haris
e-mail: mharis@afghanreconstruction.org
Telephone: 0700 08 0602
Pervaiz
e-mail: adpzmuj@yahoo.com
Telephone: 0700 61 3133

PART 2 - LOCATION

The site is located in Kabul, Afghanistan, as shown in Appendix A.
Corner 1 34°30'35.24" N 69°12'19.39" E
Corner 2 34°30'37.49" N 69°12'35.93" E
Corner 3 34°30'37.39" N 69°12'39.14" E
Corner 4 34°30'31.79" N 69°12'40.27" E
Corner 5 34°30'29.12" N 69°12'20.63" E

PART 3 - UNEXPLODED ORDNANCE (UXO)

ANA Perimeter Wall - Sia Sang Kabul, Afghanistan
01010-2 of 4

3.1 UXO REMOVAL AND CLEARANCE

The contractor is not responsible for the clearance or removal of mines and unexploded ordnance (UXO) from the site prior to the commencement of construction.
It is the responsibility of the Contractor to be aware of the risk of encountering UXO/mines and to take all actions necessary to assure a safe work area to perform the requirements of this contract. The Contractor assumes the risk of any and all personal injury, property damage or other liability arising out of or resulting from any Contractor action taken hereunder. The Contractor and its subcontractors may not handle, work with, move, transport, render safe, or disarm any UXO/mine, unless they have appropriate accreditations from the MAC.
If a UXO/mine is encountered during project construction, UXO/mine disposal shall be handled in accordance with Section 01015, Technical Requirements.

PART 4 - SUMMARY OF WORK

4.1 CONTRACTOR REQUIREMENTS

The contractor shall design and construct the facilities as a design-construct contract and shall be in accordance with the requirements stated in Section 01015: TECHNICAL REQUIREMENTS. Refer to attachment following this section for more specifics for required spaces. The design and construction work shall include but not be limited to that shown **within attached tabl e** and described herein.

4.1.1 GENERAL REQUIREMENTS FOR FACILITIES

All requirements set forth in the Scope of Work, but not included in the Technical Requirements, shall be considered as set forth in both, and vice versa. All standard construction amenities and details such as site grading shall be implied as a design and construction requirement. Drawings referenced are contained in Appendix A and B.
In general, this project consists of designing and constructing of the following:

4.1.2 Base Bid

- *1400 m long perimeter wall
- 2-Steel Security Gates
- Demolition **of existing perimeter wall**

**Length of wall is approximate and shall be verified by the Contractor.*

4.2 DEMOLITION

Demolition shall include removal of the existing perimeter wall; foundations; pavements; gates; buildings or minor structures that are either attached to the wall or in close enough proximity that they will impede the Contractor's ability to construct the wall **and provide safety to the workers;** and clearing and grubbing that is necessary to properly clear an area large enough to construct the new perimeter wall and security gates. Buildings within the perimeter wall and outside the construction work zone that are not absolutely necessary to demolish are not part of this contract and shall remain intact. **The old bathroom remains, connected to the outside pa rt of the perimeter wall, on the south s ide shall be removed completely.** All refuse and debris shall be disposed of off site. Holes and depressions shall be backfilled. All pavements (asphalt, concrete and aggregate), **and** sidewalks (concrete and aggregate) **and drainage structures** damaged or destroyed by construction activities shall be replaced in-kind to match
ANA Perimeter Wall - Sia Sang Kabul, Afghanistan
01010-3 of 4
surrounding pavements, **and** sidewalks **and drainage structures**. All structures damaged or destroyed by construction activities, which are clear from the construction work zone, shall be fully repaired or reconstructed. **All existing holes in perimeter walls shall be tempo rary fenced along with any opening created during demolition of w alls. The site shall be secured by temporary fencing from intruders.**

4.3 FORCE PROTECTION MEASURES

The Contractor shall design and construct force protection measures to include a masonry/stone perimeter wall and two steel security gates. The perimeter wall shall be approximately 1400 m long and 3.66 m tall and shall completely surround the proposed site, as shown in Appendix A. The steel security gates shall be located, as shown in Appendix A. Force protection design shall be in accordance with Joint Security Directorate Antiterrorism/Force Protection Guide, March 2002.

4.3.1 PERIMETER WALL

Native stone masonry walls shall be constructed around the perimeter of the site. The height of the walls shall measure at least 3.66 m (12 ft) from the **inside and** outside grades. The wall shall be topped with barbed wire outriggers and single-coil concertina style razor wire. **The final grade shall be kept a**

minimum of 3.66 m below the top of wall for a minimum distance of 10 m. Where there is a drainage structure the wall shall be measured from the top edge. The wall shall be designed to keep all pedestrian and truck traffic outside the compound from having a visual line of site into the compound. For approximate lengths and location of the wall, see Appendix A. For typical details for the wall, see Appendix B. The contractor shall be responsible for verifying all wall lengths and locations and shall use the typical details only as guidance for designing the wall. In a future contract, the property within the perimeter wall will be raised approximately 460 mm (1.5 ft) with fill to raise future proposed structures out of the flood plain. The Contractor shall account for the additional loading that the future 460 mm of fill will have on the wall in their design calculations. The Contractor shall perform complete final site grading after installation of all required structures. The ground shall slope away from the wall at a 53% slope for at least 35 m.

4.3.2 Gates

The gates shall be swing type. Hinged gates shall be a pair of 3.65 m wide x 3.0 m high leafs, constructed of steel plates, steel tube frame, and steel tube intermediate posts and rails. The design of the gates shall ensure that it is dimensionally stable, square, true and planar. Gate leafs shall not rack or deflect when installed on its hinges. Gates shall have a sufficient number of hinges, anchor-mounted to the exterior masonry walls, to support each gate leaf. Provide a locking mechanism that holds the gates together when in the closed position as well as a drop bolt that engages a steel sleeve embedded in the pavement. The Contractor shall ensure that the gates function as intended and shall take into account the future 460 mm of fill that will be placed within the perimeter wall. The Contractor shall ensure that the gates will open and close properly, with the minimum required gap between the bottom of the gate and top of ground, for existing conditions and future conditions with the additional fill in place. See Appendix A for proposed gate locations and Appendix B for additional gate details. The contractor shall be responsible for verifying all gate locations and dimensions.

4.4 FOUNDATION DESIGN

Foundations, including subgrade, shall be designed and constructed based on recommendations from geotechnical investigation required herein.

PART 5 - COMPLETION OF WORK

ANA Perimeter Wall - Sia Sang Kabul, Afghanistan
01010-4 of 4

All work required under this contract shall be completed within **150** calendar days from Notice to Proceed for site work.

PART 6 - REFERENCES

Refer to Section 01015 for required references.

-- End of Section --

SECTION 01015

ANA Perimeter Wall - Sia Sang Kabul, Afghanistan
01015-1 of 8

SECTION 01015

Revised 27 December 2007

TECHNICAL REQUIREMENTS

PART 1 - GENERAL

1.1 The Contractor's design and construction must comply with technical requirements contained herein. The Contractor shall provide design and construction using the best blend of cost, construction efficiency, system durability, ease of maintenance and environmental compatibility.

1.2 These design and product requirements are minimum requirements. The Contractor is encouraged to propose alternate design or products (equipment and material) that are more commonly used in the region; will be equally or more cost effective or allow for more timely completion, but furnish the same system durability, ease of maintenance and environmental compatibility. The Contractor will be required to submit information as requested by the Contracting Officer to make a comparison of the proposed alternate. All variations must be approved by the Contracting Officer.

1.3 ASBESTOS CONTAINING MATERIALS

Asbestos containing material (ACM) shall not be used in the design and construction of this project. If no

other material is available which will perform the required function or where the use of other material would be cost prohibitive, a waiver for the use of asbestos containing materials must be obtained from the Contracting Officer.

1.4 SAFETY

1.4.1 Unexploded Ordnance (UXO)

1.4.1.1 UXO/Mine Discovery During Project Construction

It is the responsibility of the Contractor to be aware of the risk of encountering UXO and to take all actions necessary to assure a safe work area to perform the requirements of this contract. If during construction, the contractor becomes aware of or encounters UXO or potential UXO, the contractor shall immediately stop work at the site of encounter, move to a safe location, notify the COR, and mitigate any delays to scheduled or unscheduled contract work. Once the contractor has informed the COR, the contractor will await further direction. The Contractor assumes the risk of any and all personal injury, property damage or other liability arising out of or resulting from any Contractor action taken hereunder.

Scrap metal shall be the property of the Host Government. The scrap metal on site shall be moved to an area away from the site perimeter as directed by the Contracting Officer's Representative and left for the Host Government to remove and/or salvage.

NOTE: For previous UXO/mine information, the following points of contact from the UN Mine Action Center of Afghanistan are provided:

Mohammad Sediq, Chief of Operations,
Email: sediq@unmaca.org
Cell: +93 070 295207

Hansie Heymans, Chief Information Officer,
Email: hansie@unmaca.org
Cell: +93 070 294286

1.4.1.2 Explosives Safety

ANA Perimeter Wall - Sia Sang Kabul, Afghanistan
01015-2 of 8

1.4.1.2.1 General Safety Considerations

General safety considerations applicable to personnel, both essential and non-essential, at project sites where UXO may be encountered include:

a. Do not carry fire or spark-producing devices.

b. Do not conduct explosive or explosive-related operations without approved procedures and proper supervision and UXO safety support.

c. Do not become careless by reason of familiarity with UXO or the reported probability level of UXO contamination.

d. Do not conduct explosive or potentially explosive operations during inclement weather.

e. Avoid contact with UXO except during UXO clearance operations.

f. Conduct UXO-related operations during daylight hours only.

g. Employ the "buddy system" at all times.

1.4.1.2.2 Activity Hazard Analysis (AHA) briefings

a. Activity Hazard Analysis's shall be prepared in accordance with the Corps of Engineers Safety and Health Requirements Manual, EM 385-1-1.

b. Hazard analyses will be prepared and briefed by personnel that are knowledgeable in UXO and explosives safety standards and requirements. These personnel should understand the specific operational requirement and hazard analysis methodologies. A hazard analysis will be performed for each activity to determine the significance of any potential explosive-related hazards. Explosive residues may be discovered or exposed during UXO operations in the form of powder or various granular and powder based pellets. These contaminants can enter the body through the skin or by ingestion if proper personal hygiene practices are not followed. Explosive fillers such as white phosphorus are dangerously reactive in air and acute exposure can result in serious injury to the skin, eyes, and mucous membranes. They are also a fire hazard.

Safety requirements (or alternatives) that will either eliminate the identified hazards, mitigate or control them to reduce the associated risks to an acceptable level will be developed. The adequacy of the operational and support procedures that will be implemented to eliminate, control, or abate identified hazards or risks will then be evaluated and a second risk assessment completed to verify that a

satisfactory safety level has been achieved.
1.4.1.3 Notification of Noncompliance
The Contracting Officer will notify the Contractor of any detected noncompliance with the foregoing requirements. The Contractor shall take immediate corrective action after receipt of such notice. Such notice, when delivered to the Contractor at the work site, shall be deemed sufficient for the purpose of notification. If the Contractor fails or refuses to comply promptly, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. The Contractor shall make no part of the time lost due to such stop orders the subject of claim for extension of time or for excess costs or damages.

1.5 LIMITATION OF WORKING SP ACE

The Contractor shall, except where required for service connections or other special reason(s), confine his operations strictly within the boundaries of the site. Workmen will not be permitted to trespass on adjoining property. Any operations or use of space outside the boundaries of the site shall be by arrangement with all interested parties. It must be emphasized that the Contractor must take all practical steps to prevent his workmen from entering adjoining property and in the event of trespass occurring the Contractor will be held entirely responsible.
ANA Perimeter Wall - Sia Sang Kabul, Afghanistan
01015-3 of 8
Areas located immediately outside the construction area are known to contain mines and unexploded ordnance (UXO). Contractors assume all risks when venturing in or out of the designated work area.

1.6 TEMPORARY STRUCTURES

The Contractor shall erect suitable temporary fences, lighting, and necessary structures to safeguard the site, materials and plant against damage or theft and for the protection of the general public and shall adequately maintain the same throughout the course of the contract.

1.7 SUBCONT RACTORS

Compliance with the provisions of this section by subcontractors will be the responsibility of the contractor.

1.8 LIST OF CODE S AND TECHNICAL CRITERIA:

The following codes and technical criteria and those referenced therein shall be required for this project. References within each reference below shall be required and adhered to. This list is not exhaustive and is not necessarily complete.
ACI 318 Building Code Requirements for Structural Concrete (latest edition), American Concrete Institute
Air Force Manual 32-1071, Security Engineering, volumes 1-4, 1 May 1994
ASCE 7-02, Minimum Design Loads for Buildings and Other Structures, 2002
ASME - American Society for Mechanical Engineering
ASTM - American Society for Testing and Materials
AWS - American Welding Society
IBC - International Building Codes, 2003 (and its referenced codes including those inset below)
IMC – International Mechanical Code
MIL-HDBK-1190, Facility Planning and Design Guide
NFPA 101, Life Safety Code, 2003 edition
International Mine Action Standards, latest edition; (see http://www.mineactionstandards.org for copy of standards)
TM 5-785 Weather Data
TM 5-802-1 Economic Studies
TM 5-805-4 Noise and Vibration
UFC 1-200-01, Design: General Building Requirements, 20 June 2005
UFC 1-300-07A Design Build Technical Requirements
UFC 1-300-09N, Design Procedures, 25 May 2005
UFC 3-310-01, Structural Load Data, 25 May 2005
UFC 4-020-01FA, Security Engineering: Project Development, 1 Mar 2005
UFC 4-020-02FA, Security Engineering: Concept Design, 1 Mar 2005
UFC 4-020-03FA, Security Engineering: Final Design, 1 Mar 2005
The publications to be taken into consideration shall be those of the most recent editions. Standards other than those mentioned above may be accepted if the standards chosen are internationally recognized and

meet the minimum requirements of the specified standards. The Contractor shall be prepared to submit proof of this if requested by the Contracting Officer.

PART 2 - SITE DEVELOPMENT

2.1 GENERAL

The project includes furnishing all materials, equipment and labor necessary for constructing a perimeter wall and two security gates.

ANA Perimeter Wall - Sia Sang Kabul, Afghanistan

01015-4 of 8

2.2 ENVIRONMENTAL PROTECTION

2.2.1 Applicable regulations

The Contractor shall comply with all Host Nation laws, rules, regulations or standards concerning environmental pollution control and abatement with regard to discharge of liquid waste into natural streams or manmade channels. The contractor shall review host nation and U.S. Government environmental regulations with the contracting officer prior to design and discharge of any liquid wastes into natural streams or manmade channels.

2.2.2 Notification

The Contracting Officer will notify the Contractor in writing of any observed non-compliance with the foregoing provisions. The Contractor shall immediately take corrective action. If the Contractor fails or refuses to promptly take corrective action, the Contracting Officer may issue an order stopping all or part of the work until satisfactory corrective action has been taken. No extension of time or damages will be awarded to the Contractor unless it was later determined that the Contractor was in compliance.

2.2.3 Spillages

Measures shall be taken to prevent chemicals, fuels, oils, greases, bituminous materials, waste washings, herbicides and insecticides, and construction materials from polluting the construction site and surrounding area.

2.2.4 Disposal

Disposal of any materials, wastes, effluents, trash, garbage, oil, grease, chemicals, etc., shall be taken to a dumpsite off site and subject to the approval of the Contracting Officer. Burning at the project site for the disposal of refuse and debris will not be permitted.

2.3 CIVIL SITE DEVELOPMENT

2.3.1 SITE PLAN

The contractor shall locate the facilities in general agreement with the drawings included and any requirements in the Scope of Work 01010. All existing buildings, roads, parking areas, entry control points, guard towers, wall, fence, utility structures, and other site features shall be clearly defined and dimensioned on the site plan.

The site plan shall show geometric design of the site, including applicable dimensions of the perimeter wall, security gates and etc. Required facilities are described in the following sections of this specification. All site plans and master plans shall be drawn in the following projection and datum for incorporation into the U.S. Army Corps of Engineers GIS system:

WGS 1984 UTM Zone 42 N

2.3.2 DEMOLITION

Demolition shall include removal of the existing perimeter wall; foundations; pavements; gates; buildings or minor structures that are either attached to the wall or in close enough proximity that they will impede the Contractor's ability to construct the wall; and clearing and grubbing that is necessary to properly clear an area large enough to construct the new perimeter wall and security gates. Buildings within the perimeter wall and outside the construction work zone that are not absolutely necessary to demolish are not part of this contract and shall remain intact. All refuse and debris shall be disposed of off site. Holes

ANA Perimeter Wall - Sia Sang Kabul, Afghanistan

01015-5 of 8

and depressions shall be backfilled. All pavements (asphalt, concrete and aggregate), **and** sidewalks (concrete and aggregate) **and drainage structures** damaged or destroyed by construction activities shall be replaced in-kind to match surrounding pavements, **and** sidewalks **and drainage structures**. All structures damaged or destroyed by construction activities, which are clear from the construction work zone, shall be fully repaired or reconstructed. Fill materials shall be composed of satisfactory soils or aggregates defined in ASTM D 2487 as GW, GP, GM, SP, SM, SW, CL-ML. Minimum soil compaction

shall be 95% percent of maximum density as defined in ASTM D 1557.

2.3.3 GRADING AND DRAINAGE

The contractor shall provide all necessary site grading to ensure adequate drainage so that no areas will be flooded due to a rainfall of a 10-year frequency. Drainage of the area should be compatible with the existing terrain. The contractor shall properly grade the area around the perimeter wall and security gates by sloping away from the wall on all sides at a minimum of 5% for 3 meters.

2.3.3.1 Exterior Compound Wall

Design and construct a Force Protection Perimeter Stone Masonry Wall per Scope of Work Section 01010 and RFP. All foundations shall extend below the frost line to frost depth (min 800 mm), top of wall shall be 3.66 m (12 ft) from finish grade to high point of concrete cap. Provide detail/elevation of wall indicating how it will transition from level to slope and over ridges. The footing must be sized to resist sliding and overturning from the design loads. The Contractor shall account for the additional loading that the future 460 mm of fill will have on the wall in their design calculations. Install outriggers and singlestrand

concertina wire on top of the wall. The walls shall measure at least 3.66 m high with a thickness of the walls not less than 600 mm.

2.3.3.2 Gates

The gates shall be swing type. Vehicle gates shall be a pair of 3.65 m wide x 3.0 m high leafs, constructed of a steel tube frame and steel tube intermediate posts and rails. Design and construct a Force Protection entry gates heavy steel frame, with minimum 25 mm steel skin and matching man gate with view port. Gates shall swing from one meter square reinforced concrete columns covered with stone to match fence. Provide reinforced grade beam across gateway flush with pavement to lock gates with flush mounted vertical sliding bolts, bolts shall be 50 mm dia solid steel. The design of the gates shall ensure that it is dimensionally stable, square, true and planar. Gate leafs shall not rack or deflect when installed on its hinges. Gates shall have a sufficient number of hinges to support each gate leaf. Provide a locking mechanism that holds the gates together when in the closed position as well as a drop bolt that engages a steel sleeve embedded in the pavement. In a future contract, the property within the perimeter wall will be raised approximately 460 mm (1.5 ft) with fill to raise new structures out of the flood plain. The contractor shall ensure that the grade beams, for the security gates, will be flush with the future fill elevation.

2.3.3.3 Outriggers

Outrigger supporting arms shall be "Y" shaped with post securely embedded into the top of the wall. Posts shall conform to ASTM F 1083, Pipe, Steel, and Hot Dipped Zinc Coated (Galvanized) Welded.

2.3.3.4 Reinforced Barbed Tape and Barbed Wire

Barbed wire shall conform to ASTM A 121 zinc-coated, Type Z, Class 3, or aluminum-coated, Type A, with 12.5 gauge wire and 14 gauge, round, 4-point barbs spaced no more than 125 mm (5-inches) apart. The Contractor shall install six (6) horizontal rows of barbed wire, with three rows on each side of the "Y" shaped outriggers, as shown in Appendix B. Reinforced barbed tape shall be 600 mm diameter concertina style coil consisting of 31 loops. Each loop shall consist of 19 barb clusters per loop. Adjacent

coils loops shall be alternately clipped together at three points about the circumference to produce the concertina effect upon deployment. Spacing between attachments points when deployed shall be 400 mm. The reinforced barbed tape shall be fabricated from 430 series stainless steel with hardness range of Rockwell (30N) 37-45 conforming to the requirements of ASTM A 176. Each barb shall be a minimum of 30.5 mm (1.2 inch) in length, in groups of 4, spaced on 102 mm (4 inch) centers. The stainless steel core wire shall have a 2.5 mm (0.098 inch) diameter with a minimum tensile strength of 895 MPa. Sixteen gauge stainless steel twistable wire ties shall be used for attaching the barbed tape to the barbed wire. The reinforced barbed tape shall be equivalent to NSN: 5660-01-457-9852.

PART 3 - ARCHITECTURAL

3.1 GENERAL

All material approved shall become standardized material to be used throughout the facilities under contract. Different sub-contractors shall not use different material or standards under the contract. Intent of the project is to use locally procured materials (unless specified otherwise) and labor to the maximum extent possible while satisfying seismic building code. Conflicts between criteria shall be brought to the

attention of the Contracting Officer for resolution. In such instances, the Contractor shall furnish all available information with justification to the Contracting Officer.

3.2 DESIGN CRITERIA

The Codes, Standards, and Regulations listed herein shall be used in the construction of this project. The publications shall be the [referenced [most recent] editions. Standards other than those mentioned may be accepted provided they meet the minimum requirements and the contractor shall submit proof of equivalency to the Contracting Officer for approval.

IBC- International Building Code

3.3 EXCAVATION

Trench excavation shall be made for concrete footings. Trenches shall be a minimum of 0.8 meter deep. Trenches deeper than 1.5 meters shall have protective shoring to protect workers or have the sides of the trench sloped back at a slope of 1.5:1. Care shall be taken when backfilling of foundation trenches to avoid damage to walls. Any excess dirt shall become the property of the Contractor and shall be removed from the site to a location approved by the Contracting Officer.

3.4 CONCRETE

Foundation trenches shall be level and free of loose material. Trenches shall be inspected and approved by the Contracting Officer prior to placing of any concrete foundations. See paragraphs 3.5 and 4.6 for structural characteristics of concrete and reinforcing steel for foundations and slabs.

3.5 STANDARDS

The Contractor should use the following American standards to provide sound structural design if local standards are not available, relevant, or applicable. The Contractor shall follow American Concrete Institute Standards for design and installation of all concrete structures.

Concrete 210.0 kg./sq.cm (f'c) a minimum specified compressive strength
@ 28 days (ASTM-. C 31M)
Steel Reinforcement 4218.0 kg./sq.cm(Fy= 60.0 ksi),yield strength.
Anchor Bolts ASTM A307 using A36 steel.
Concrete Masonry Units ASTM C90, Type I (normal wt, moisture Cntrl).
Mortar ASTM C270, Type S (Ultimate compressive strength of 130.0
ANA Perimeter Wall - Sia Sang Kabul, Afghanistan
01015-7 of 8
kg/sq. cm.)
Proportion 1 part cement, 0-1/2 part lime and 4-1/2 parts aggregate
Grout ASTM C476 (Slump between 200 mm to 250 and Compressive
Strength 14 MPa (2000 psi) at 28 days.
Structural Steel ASTM A36: 2530.0 kg./sq.cm (Fy = 36,000psi)
Welding AWS (American Welding Society) D1.1-2002.

PART 4 - STRUCTURAL

4.1 GENERAL

The project consists of a perimeter wall and two security gates. The new perimeter wall and columns for the security gates shall be provided with a reinforced concrete slab foundation that is properly placed on an area of suitable compacted ground and shall be in accordance with the recommendations from the geotechnical investigation. The reinforced concrete foundation shall be designed by the Contractor. Wall foundations shall be founded a minimum of 800 mm below grade.

4.2 DESIGN

Design shall be performed and design documents signed by a registered professional architect and/or engineer. Calculations shall be in SI (metric) units of measurements. All components of the perimeter wall and security gates shall be designed and constructed to support safely all loads without exceeding the allowable stress for the materials of construction in the structural members and connections.

4.3 DEAD AND LIVE LOADS

Dead loads consist of the weight of all materials of construction incorporated in the perimeter wall and security gates. Live loads used for design shall be in accordance with the Structural Load Data, UFC-3-310-01, as referenced herein.

4.4 WIND LOADS

Wind loads shall be calculated using a "3-second gust" wind speed of 135 km/hr.

4.5 SEISMIC

The perimeter wall, security gates and all parts thereof shall be designed for the seismic requirements as defined by the International Building Code referenced herein. Spectral ordinates shall be S_s = 1.28g and S_1 = 0.51g.

4.6 STRUCTURAL CONCRETE

Concrete structural elements shall be designed and constructed in accordance with the provisions of the American Concrete Institute, Building Code Requirements for Structural Concrete, ACI 318, latest edition. A minimum cylinder 28 day compressive strength of 21 MPa (3000 psi) shall be used for design and construction of all concrete. Reinforcing steel shall be deformed bars conforming to American Society for Testing and Materials (ASTM) publication ASTM a 615, Deformed and Plain Billet-Steel Bars for Concrete Reinforcement. Concrete at or below grade shall have a maximum water-cement ration of 0.50. No concrete shall be placed when the ambient air temperature exceeds 32 degrees C (90 degrees F) unless an appropriate chemical retardant is used. In all cases when concrete is placed at 32 degrees C (90 degrees F) or hotter it shall be covered and kept continuously wet for a minimum of 48 hours. Concrete members at or below grade shall have a minimum concrete cover over reinforcement of 75 mm (3 inch). ACI cold weather requirements shall also be met as necessary.

ANA Perimeter Wall - Sia Sang Kabul, Afghanistan

01015-8 of 8

4.7 STRUCTURAL STEEL

Structural steel shall be designed and constructed in accordance with the provisions of American Institute of Steel Construction (AISC), Specifications for Structural Steel Buildings, 9th Edition. Design of coldformed

steel structural members shall be in accordance with the provisions of American Iron and Steel Institute (AISI), Specifications for Design of Cold-Formed Steel Structural Members.

4.8 FOUNDATIONS

Foundations shall be in accordance with the Geotechnical requirements of this RFP.

PART 5 - GEOTECHNICAL

5.1 SOIL INVESTIGATION

Existing geotechnical information is not available at the project site. Any site-specific geotechnical data required to develop foundations, materials, earthwork, and other geotechnical related design and construction activities for this project shall be the Contractor's responsibility. The Contractor shall develop all pertinent geotechnical design and construction parameters by appropriate field and laboratory investigations and analyses. The Contractor shall produce a detailed geotechnical report containing field exploration and testing results, laboratory testing results (particle sizes and distribution, liquid and plastic limit tests, moisture and density test, etc.). Information in the report shall include, but not be limited to: existing geotechnical conditions (i.e. surface and subsurface), location of subsurface exploration logs on a site plan, exploration point, allowable soil bearing capacity, foundations recommendations, pavement design criteria (e.g. California Bearing Ratio values, subgrade modulus values), ground-water levels, and construction materials (e.g. concrete , asphalt, aggregates, etc.). Two copies of the detailed geotechnical report shall be submitted to the Contracting Officer.

5.2 GEOTECHNICAL QUALIFICATIONS

A geotechnical engineer or geotechnical firm responsible to the Contractor shall develop all geotechnical engineering design parameters. The geotechnical engineer or geotechnical firm shall be qualified by: education in geotechnical engineering; professional registration; and a minimum of ten (10) years of experience in geotechnical engineering design.

END OF SECTION

(End of Summary of Changes)

QUESTIONS & ANSWERS (Q&A)
W917PM-08-R-0015
Wall Sia Sang; Kabul, Afghanistan
(Questions & Answers provided for informational purposes only)
If any Government responses indicate a change to the technical proposal, it is not official until and amendment is issued)
27 December 2007

Question 1: As per Section 00800, Para. 52.000-4105 the DBA premium rate shall be calculated at $8.50 per $100 of direct compensation, whereas, Para. 52.000-4106 states that the rate shall be $7.25 per $100 of direct compensation.

Answer: The DBA insurance for construction is $7.25 per $100.

Question 2: As per Section 01010, Para. 4.3.1 the grade within the compound shall be raised (on a follow on contract) by 460mm. Likewise, the Wall Dimensions as shown in Appendix B reflects dimension D from grade to bottom of foundation. Though these are guidelines, if the contractor takes the grade as an outside compound, the true height of the wall will be reduced by the fill on the inside. Does the CoE intend the representative height of the wall to be maintained at H dimension on the interior of the compound, thus the true wall height should be a minimum of 4.32 meters?

Answer: 3.1 Native stone masonry walls shall be constructed around the perimeter of the site. The height of the walls shall measure at least 3.66 m (12 ft) from the inside and outside grades. The wall shall be topped with barbed wire outriggers and single-coil concertina style razor wire. The final grade shall be kept a minimum of 3.66 m below the top of wall for a minimum distance of 10 m. The wall shall be designed to keep all pedestrian and truck traffic outside the compound from having a visual line of site into the compound. For approximate lengths and location of the wall, see Appendix A. For typical details for the wall, see Appendix B. The contractor shall be responsible for verifying all wall lengths and locations and shall use the typical details only as guidance for designing the wall. In a future contract, the property within the perimeter wall will be raised approximately 460 mm (1.5 ft) with fill to raise future proposed structures out of the flood plain. The Contractor shall account for the additional loading that the future 460 mm of fill will have on the wall in their design calculations. The Contractor shall perform complete final site grading after installation of all required structures. The ground shall slope away from the wall at a 3% slope for at least 5 m.

Contract requires them to be at least 3.66 meters in height for current conditions. The detail (Appendix B) is for guidance only. The wall shall be designed to handle the future loading.

Question 3: Is the height of wall same at the all length of the wall or it differs in some locations?

Answer: See Appendix B and specification Section 01010 paragraph 4.3.1 of amendment.

Question 4: Is the site demines or not? If it is demined, who is going to guaranty?

Answer: See specifications Section 01010 paragraph 3.1 and Section 01015 paragraph 1.4.1 of amendment. No guaranty.

Question 5: There are 3 stories tower in south west corner of the site and an electrical station tower adjacent to the existing west side perimeter wall (in appendix A of RFP see Photos pg.7 and pg.9), Are they going to be demolished?

Answer: Demolish only what is needed to construct wall. See specifications Section 01010 paragraph 4.2 of amendment . Do not demolish any active items.

Question 6: Adjacent and attached to the east and west sides of the existing perimeter wall, There are constructed perpendicularly numbers of walls 8 to 10 meters long, so how many meters length of the walls should be demolish? (in appendix A of RFP please conceder photos pg.6, pg.9 and pg.11).

Answer: Demolish only what is needed to construct wall. See specifications Section 01010 paragraph 4.2 of amendment.

Question 7: All produced materials (mud brick, stone and soil) in the result of demolishing and mobilization should be remove away and transfer from the site?

Answer: That is correct. See specifications Section 01010 paragraph 4.2 of amendment.

Question 8: In a schematic wall section, please show the Ground Line (G.L), Zero Level Line and 46 cm inside filling.

Answer: See Appendix B of amendment.

Question 9: There is need a wall section to shows Ground Level and Zero Level of the inside and out side of the site (including 46 cm filling) and Zero Level of the main north road.

Answer: **See Appendix B and specifications Section 01010 paragraph 4.3.1 of amendment.**

Question 10: If you conceder and check the site at the North West corner of the site is a big pile of soil, small pieces of brick and stone. (Are these useless materials remove able?)

Answer: Yes!

Question 11: During the site visit on 23/12/07, it mentioned by your engineer that wall section drawing will be released in Army Corp Site. And has been said that 36 cm back filling of all area will tack place, the wall height is 3.6 m, the question is here that the given height is with back fill area or without.

Answer: See Appendix B and specifications Section 01010 paragraph 4.3.1 of amendment.

Question 12: How can I know about any amendments about this project?

Answer: You need to check the AED web site for amendments to the solicitation and information that may be posted about the project.

Question 13: If any proposal is not considered for the project, will the firm be informed about that?

Answer: Yes

Question 14: Can a company ask for a debriefing if their proposal is not considered for the project?

Answer: Yes

Question 15: Do I need to update my registration with USACE prior to submitting my proposal? If yes, how can I proceed?

Answer: USACE does not require contractors to register, it is recommended that you register with Central Contract Registration (CCR) and also get a DUNs number. However, it is not mandatory for Afghanistan companies. If you have not registered with the CCR or do not have a Duns number this will not stop you from submitting your proposal.

APPENDIX A

Site Maps and Pictures

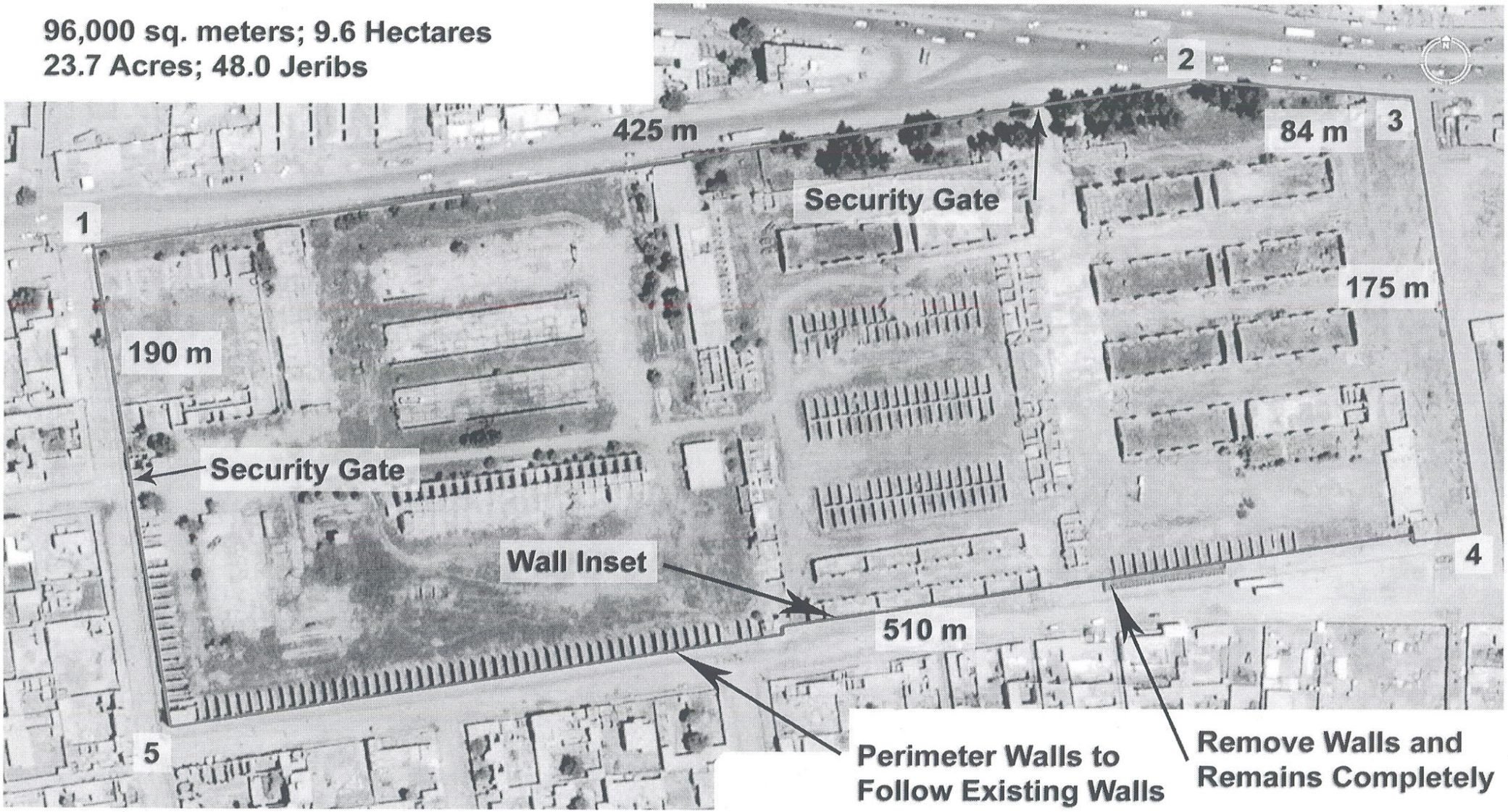
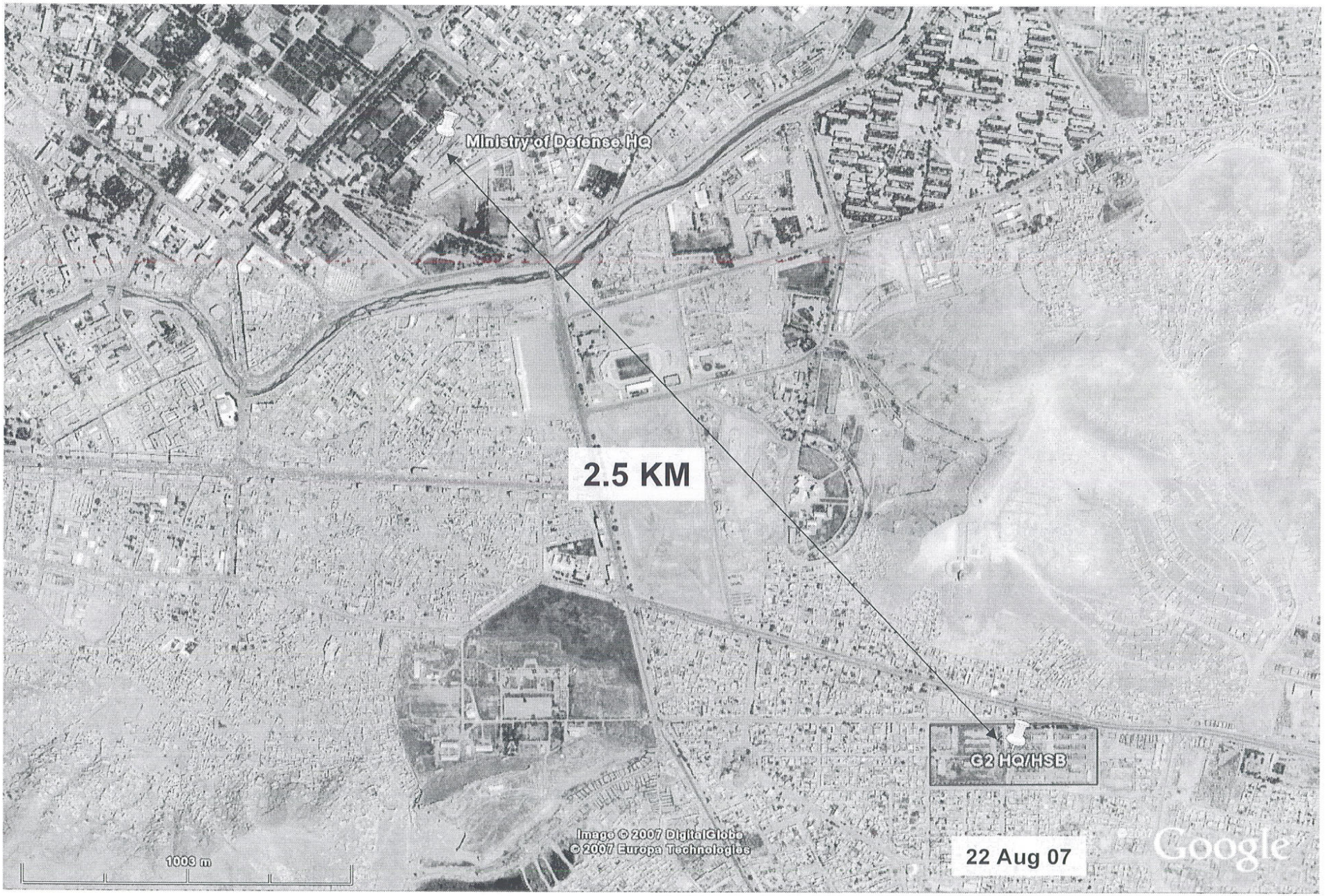
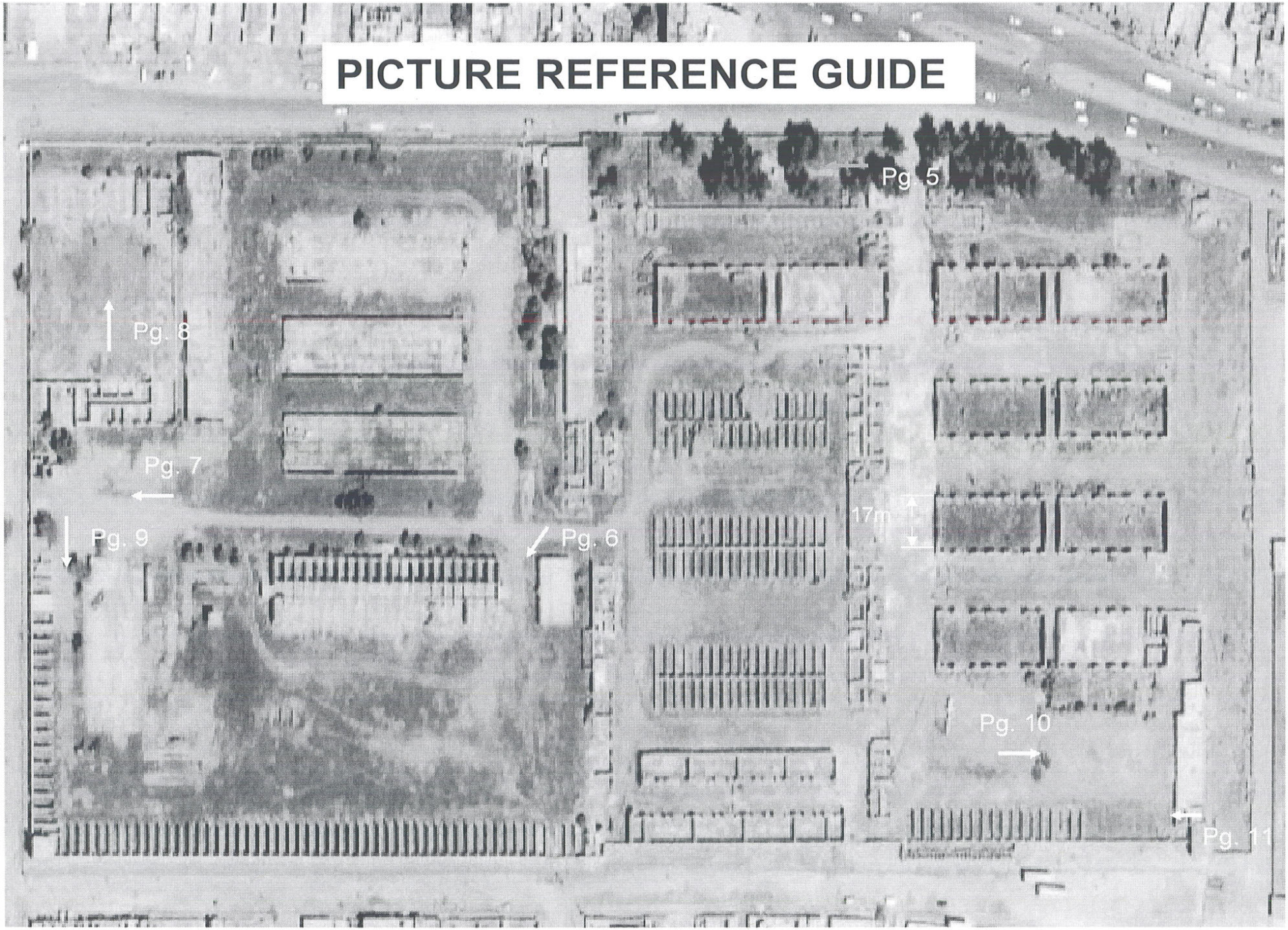
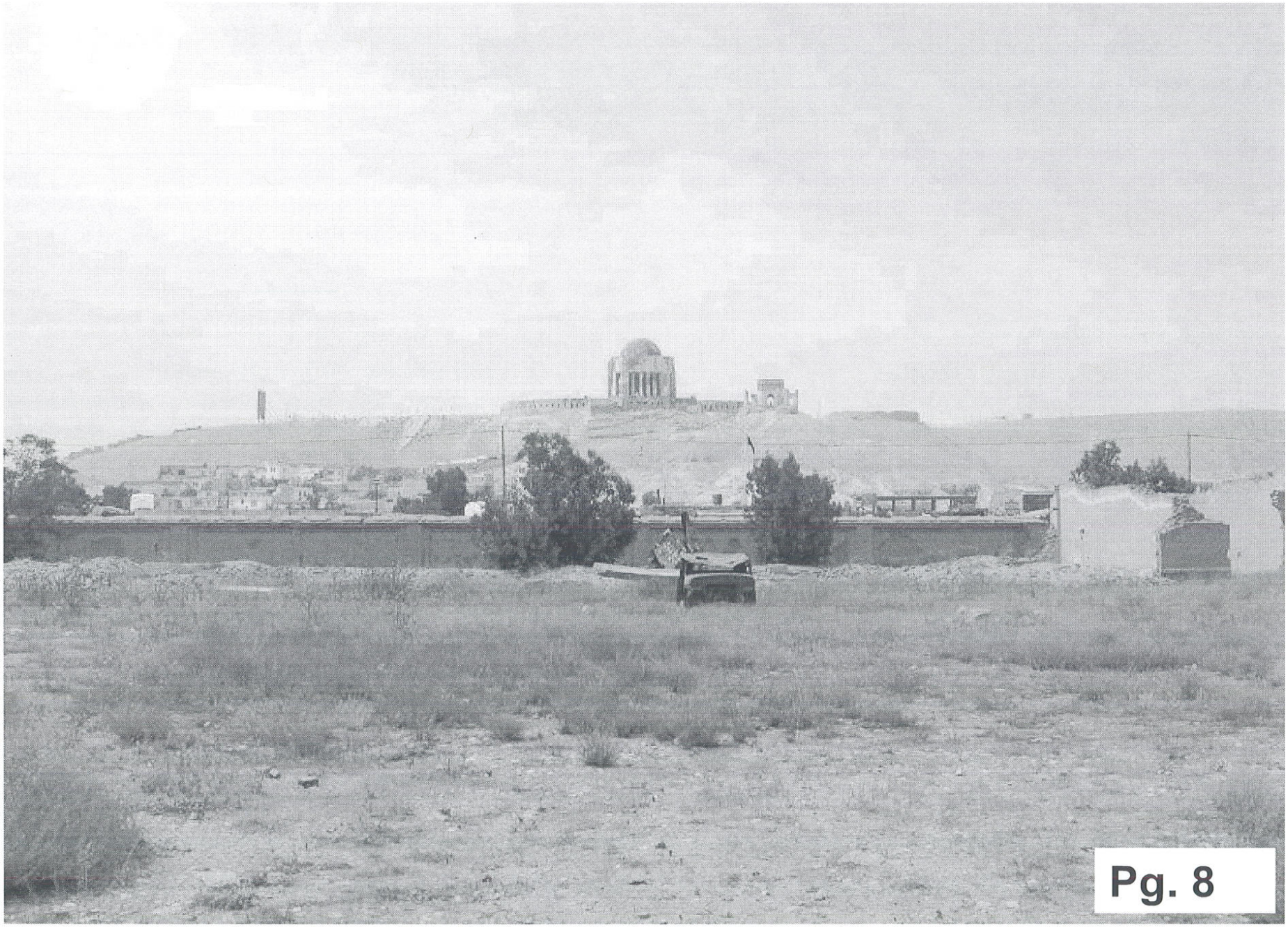


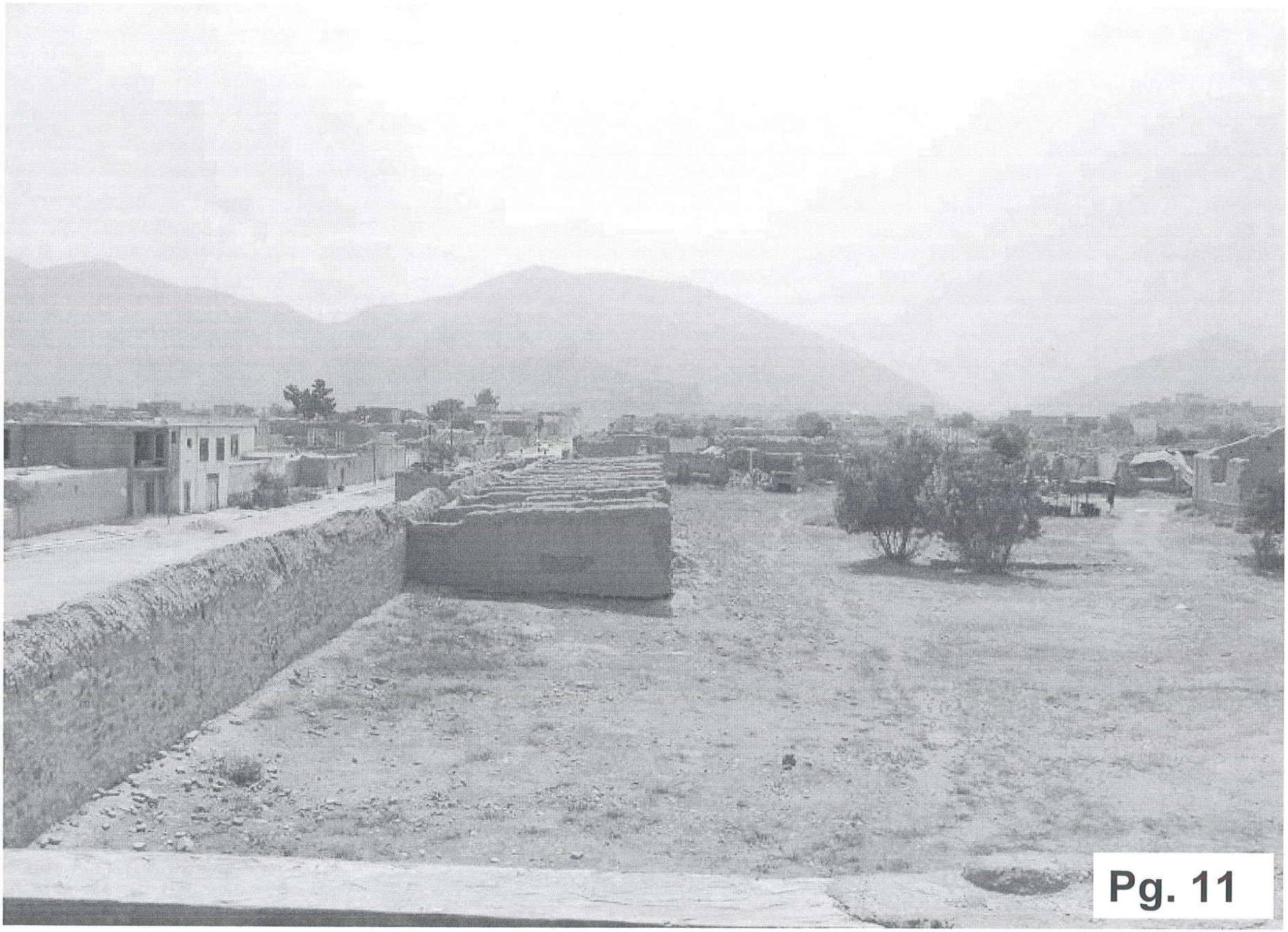
Exhibit A1 - G2 HQ and HSB - Kabul - ROE

Exhibit A2 – G2 HQ and HSB - Kabul - ROE




PICTURE REFERENCE GUIDE
Pg. 5
Pg. 8
Pg. 7
Pg. 9
Pg. 6
17m
Pg. 10
Pg. 11

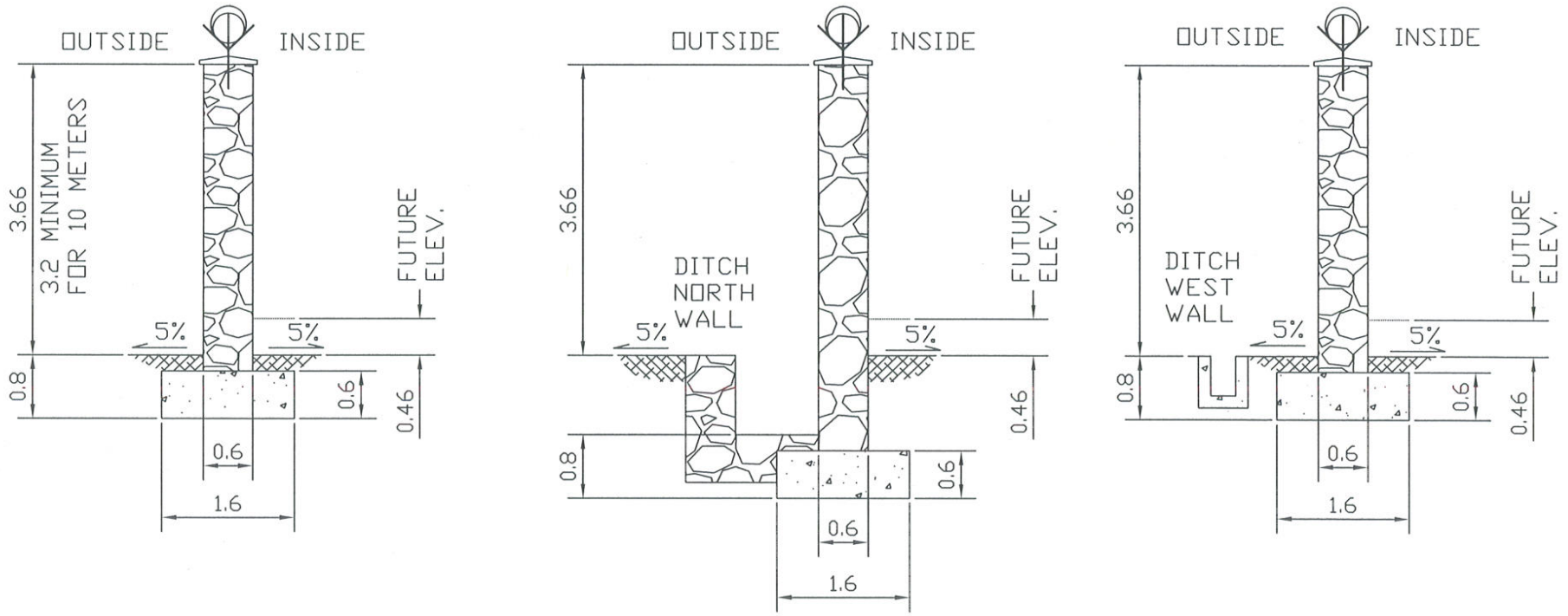




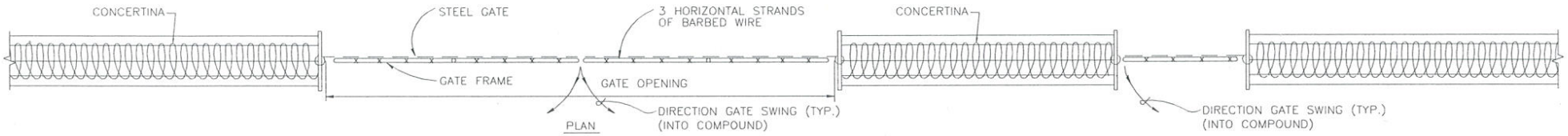
APPENDIX B

Typical Wall & Gate Details

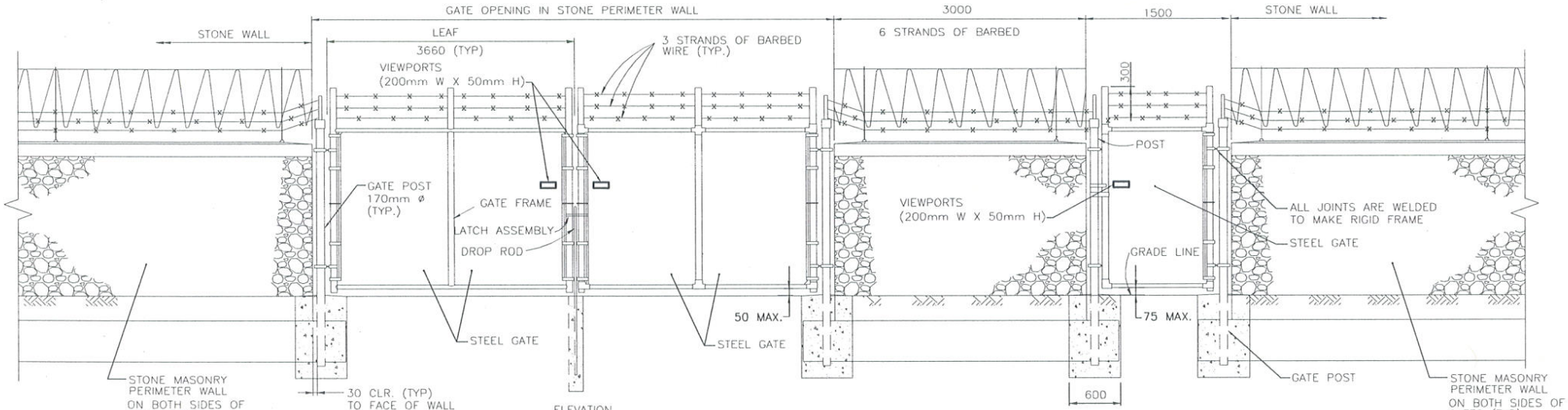
NOTES:
1. THESE FOOTINGS ARE FOR INFORMATION ONLY. THE SIZE AND DESIGN OF ALL ELEMENTS IS STILL THE RESPONSIBILITY OF THE DESIGN-BUILD CONTRACTOR
2. STANDARD WALL SIZE BE USED UNLESS NOTED OTHERWISE.
3. FOOTING SHALL BE REINFORCED CONCRETE.
4. DIMENSIONS ARE IN METERS



TYPICAL BOUNDARY WALL



PLAN



ELEVATION

DOUBLE SWING GATE
NTS

PERSONNEL GATE
NTS